

Nos. 07-588, 07-589 & 07-597

In The
Supreme Court of the United States

ENTERGY CORPORATION, *Petitioner*

v.

ENVIRONMENTAL PROTECTION AGENCY, *et al.*

PSEG FOSSIL LLC, *et al.*, *Petitioners*

v.

RIVERKEEPER, INC., *et al.*

UTILITY WATER ACT GROUP, *Petitioner*

v.

RIVERKEEPER, INC., *et al.*

**On Writ Of Certiorari To The
United States Court Of Appeals
For The Second Circuit**

**BRIEF FOR AMICI CURIAE CLEAN AIR
TASK FORCE & CLEAN WATER ACTION –
NEW ENGLAND, ET AL. AS AMICI CURIAE
SUPPORTING RESPONDENTS
RIVERKEEPER, *ET AL.***

ANN BREWSTER WEEKS
CLEAN AIR TASK FORCE
18 Tremont Street, Suite 530
Boston, MA 02108
(617) 624-0234

*Counsel of Record for Amici Curiae
Clean Air Task Force, Clean Water
Action – New England, HealthLink
Kentucky Resources Council, and
Ohio Environmental Council*

TABLE OF CONTENTS

	Page
TABLE OF CONTENTS	i
TABLE OF AUTHORITIES	ii
INTEREST OF AMICI CURIAE.....	1
INTRODUCTION AND SUMMARY OF THE ARGUMENT.....	2
ARGUMENT.....	4
1. The Plain Language of Clean Water Act Section 316(b) Does Not <i>Ipsa Facto</i> Yield the Outcomes Assumed by Industry Petitioners and their Amici.....	4
2. The Plain Language of Section 316(b) Allows EPA To Consider Adverse Energy and Environmental Impacts in Setting BTA Standards	5
3. Industry Petitioner’s Parade of Horribles is Discredited Because it is Based on Flawed EPA Modeling	6
4. Real-world Experience With Cooling Water Intake System Improvements Belies Industry’s Dire Predictions.....	11
CONCLUSION.....	12

TABLE OF AUTHORITIES

Page

CASES:

<i>Logan v. U.S.</i> , ___ U.S. ___, 128 S.Ct. 475 (2007).....	3
<i>Public Citizen v. U.S. Dep't of Justice</i> , 491 U.S. 440 (1989) (Kennedy, J., concurring).....	3, 12
<i>Riverkeeper, Inc. v. EPA</i> , 358 F.3d 174 (2d Cir. 2004)	5
<i>Riverkeeper, Inc. v. EPA</i> , 475 F.3d 83 (2d Cir. 2007)	5, 6

STATUTES AND REGULATIONS:

Clean Water Act:

33 U.S.C. § 1326(b)	1, 2
National Pollutant Discharge Elimination System – Proposed Regulations to Establish Requirements for Cooling Water Intake Structures at Phase II Existing Facilities, 67 Fed. Reg. 17,122 (April 9, 2002)	8
National Pollutant Discharge Elimination System – Final Regulations to Establish Re- quirements for Cooling Water Intake Struc- tures at Phase II Existing Facilities, 69 Fed. Reg. 41,576 (July 9, 2004).....	7, 9

TABLE OF AUTHORITIES – Continued

Page

ADMINISTRATIVE AUTHORITIES:

EPA Response to Public Comment – National Pollutant Discharge Elimination System – Regulations to Establish Requirements for Cooling Water Intake Structures at Phase II Existing Facilities; Author ID Number: 316bEFR.010.....	10
EPA Response to Public Comment – National Pollutant Discharge Elimination System – Regulations to Establish Requirements for Cooling Water Intake Structures at Phase II Existing Facilities; Author ID Number: 316bEFR.061.....	8, 9

OTHER AUTHORITIES:

Brief of Amici Curiae HealthLink, <i>et al.</i> , <i>Surf-rider Foundation v. U.S. EPA</i> , No. 04-6692-ag(L) (2d Cir. July 26, 2005).....	7
Brief of Amici Curiae Economists Frank Ackerman, <i>et al.</i> , <i>Entergy Corp. v. EPA</i> , U.S. Nos. 07-588, 07-589 and 07-597 (September 2008).....	9
Bethlehem Energy Center CCGT Power Plant, New York Power Technology, http://www.power-technology.com/projects/bethlehem/ (last visited October 1, 2008).....	12
Modernizing El Segundo’s Power Generating System, http://www.elsegundorepowering.com (last visited October 1, 2008).....	11

INTEREST OF THE AMICI CURIAE

Amici curiae Clean Air Task Force, Clean Water Action-New England, HealthLink, Kentucky Resources Council, and The Ohio Environmental Council (collectively, “Environmental Amici”) are not-for-profit environmental and public health organizations working to improve environmental quality in their respective regions and throughout the United States. Specifically, Environmental Amici, on behalf of their thousands of members and contributors, have been advocates on energy-related environmental matters, with the goal of reducing the significant environmental, public health, and climate impacts of the fossil-fueled power plants that are subject to the regulations under review in this case. Environmental Amici provided legal and technical comments to the record on the Environmental Protection Agency (“EPA”) rule at issue, and submitted an amicus brief in the case challenging that rule before the United States Court of Appeals for the Second Circuit. Amici therefore bring an informed perspective on the question whether and to what extent adverse air quality and climate impacts will necessarily result from standard setting under the plain text of section 316(b) of the Federal Water Pollution Control Act, 33 U.S.C. § 1326(b).¹



¹ No counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No persons other than amici or their counsel made a monetary contribution to its preparation or submission. All of the parties to this suit have consented to the filing of this brief.

INTRODUCTION AND SUMMARY OF ARGUMENT

Environmental Amici offer this brief to the Court from our singular perspective as a group of organizations that work in the public interest on energy, climate change, air pollution and water pollution issues related to the nation's existing electric generating system. In particular, this brief rebuts the assertions made by Industry Petitioners Entergy Corp., *et al.* ("Entergy"), Utility Water Act Group ("UWAG"), and their supporting amici the Nuclear Energy Institute ("NEI") (collectively, "Industry"), that adverse air and climate change impacts will result as a matter of course if section 316(b) of the Federal Water Pollution Control Act, 33 U.S.C. § 1326(b) ("section 316(b)"), is read to prohibit EPA from using cost-benefit analysis in setting Best Technology Available ("BTA") performance standards for existing power plant cooling water intake structures.

As an initial matter, we agree with the brief filed by Respondents Riverkeeper, *et al.*, and incorporate the arguments it contains, particularly that the plain language of section 316(b) does not authorize EPA to set performance standards under section 316(b) based on cost-benefit analyses. Riverkeeper Br. at 22-53. Moreover, we agree that this understanding of the statute's language does not require EPA "to make BTA determinations on the broadest categorical basis conceivable . . . ignor[ing] any and all differences among facilities and their locations." *Id.* at 31 (refuting assertions made in UWAG Br. at 43-50; NEI Br. 22-25; Nebraska, *et al.* Amicus Br. 8-10).

Industry argues, however, that the plain language of section 316(b) should be disregarded, because they assert that its application will yield such significant adverse environmental results that Congress could not have meant it to mean what it says. Entergy Br. at 52 (citing *Logan v. U.S.*, ___ U.S. ___, 128 S.Ct. 475, 848 (2007)); UWAG Br. at 27-28. They allege that if section 316(b) is read, as it must be, to prohibit the use of cost-benefit analysis in standard setting, the result will be increased air and climate-forcing emissions caused by additional fuel use associated with more protective cooling water systems. Entergy Br. at 5-6, 49-51; UWAG Br. at 27-28; NEI Br. at 3-4, 21-22. But Industry's arguments do not present genuinely absurd results – indeed, they are based on false legal premises and inaccurate technical analyses, and they do not comport with real-world experience with retrofitting cooling water intake systems. As such, Industry has failed to provide sufficient justification for the Court to disregard the plain text of the statute. *See Public Citizen v. U.S. Dep't of Justice*, 491 U.S. 440, 470-472 (1989) (Kennedy, J., concurring in the judgment).



ARGUMENT

1. The Plain Language of Section 316(b) Does Not *Ipsa Facto* Yield the Results Assumed by Industrial Petitioners and Their Amici.

Industry’s contentions are based on the premise that if EPA implements the statute as it is written – without using cost-benefit analysis tools to select BTA – the plain meaning of the statute will *necessarily* cause EPA to issue rules on the broadest categorical basis conceivable, for example, requiring that all existing power plants must apply closed cycle or dry cooling technology.² Riverkeeper, *et al.* have amply demonstrated in their briefs that this is an entirely flawed assumption as a legal matter. Riverkeeper Br. at 26-33. For, “[s]ection 316(b) does not, after all, require EPA to order that a certain technology be used, but permits the Agency instead to establish performance standards that reflect the use of available technology.” *Id.* at 30. Indeed, as found by the Second Circuit, the statute provides EPA authority to select the best technology³ for “minimizing adverse

² See, e.g., NEI Br. at 13, n.17 (speculating that “[i]f the EPA is foreclosed from considering the costs of implementing proposed technologies, except in the limited respects permitted by the court of appeals, respondents will almost certainly contend that the agency must mandate adoption of closed-cycle cooling.”).

³ As an initial matter, EPA must select the “optimally best performing” technology as the basis for BTA, but then “must . . . ascertain whether the industry as a whole can reasonably bear the cost of the adoption of the technology, bearing in mind the

(Continued on following page)

environmental impact,” considering air quality and energy efficiency concerns, and thereby avoiding the “parade of horrors” that animate the Industry briefs. *Riverkeeper, Inc. v. EPA*, 475 F.3d 83, 100 n.12 (2d Cir. 2007); *see also Riverkeeper, Inc. v. EPA*, 358 F.3d 174, 194-95 (2d Cir. 2004) (allowing EPA, in setting section 316(b) standards for new power plants, to consider the air pollution associated with projected energy efficiency losses).

2. The Plain Language of Section 316(b) Allows EPA To Consider Adverse Energy and Environmental Impacts in Setting BTA Standards.

Industry conflates two separate issues in its attempt to inject questions related to energy and adverse environmental impacts into the case before this Court. As explained above, these issues are relevant to the goal of establishing section 316(b) standards, that is, the minimization of adverse energy and environmental impacts from cooling water intake. Such questions, however, are not directly relevant to EPA’s authority under section 316(b) concerning the use of cost-benefit analysis. *See* Br. of Amici Curiae Economists Frank Ackerman, *et al.*, *Entergy Corp. v. EPA*, U.S. Nos. 07-588, 07-589 and 07-597 (September 2008) at 25-26 (describing the

aspirational and technology-forcing character of the [Clean Water Act].”). *Riverkeeper, Inc. v. EPA*, 475 F.3d 83, 100 (2d Cir. 2007).

differences between a cost-benefit calculation on the one hand, and, on the other hand, crafting a regulation based on its fundamental goals and the application of a cost-effectiveness analysis to choose between technologies that meet those goals).

In fact, EPA did consider the energy penalty issues raised by Industry during the course of the Phase II cooling water rulemaking, and found them negligible. Specifically, in its description of the market impacts that could result if closed cycle cooling were established as BTA for power plants on sensitive waterbodies, EPA noted that capacity closures of 1.1 percent in the Northeast and 1.3 percent in the West “would represent an insignificant percentage of total baseline capacity in [those] regions.” National Pollutant Discharge Elimination System – Proposed Regulations to Establish Requirements for Cooling Water Intake Structures at Phase II Existing Facilities, 67 Fed. Reg. 17,122, 17,186/1 (April 9, 2002). It is furthermore noteworthy that the Second Circuit has remanded the rule to the Agency for further explanation related to energy efficiency and production concerns raised below by the parties. *Riverkeeper*, 475 F.3d at 100 n.12.

3. Industry Petitioners’ Parade of Environmental Horribles Is Discredited Because it is Based On Flawed EPA Modeling.

Furthermore, Industry’s assertions that significant air pollution emissions increases (implicating

public health and global warming impacts) will assuredly follow *if* this Court effectuates the plain language of section 316(b)⁴ are based on inaccurate technical assumptions made by the Agency in its rulemaking below.

Environmental Amici have previously brought these technical flaws to the attention of EPA, in the rulemaking record underlying this case, and to the Second Circuit Court of Appeals, in a brief as amici curiae. In that brief, and in the record before the Agency on the rulemaking in this case, Environmental Amici show that EPA's (now Industry's) assertions of a "permanent" energy penalty and associated incremental air quality and climate impacts are simply overstated, and in some instances wrong. Brief of Environmental Amici HealthLink, *et al.*,

⁴ Entergy argues that a plain reading of section 316(b) *necessarily* will result in the application of technologies that are "less effective at cooling and therefore reduce the efficiency and electric output of the facilities using them" – resulting in increased air pollutant emissions, causing additional public health and climate impacts. Entergy Br. at 5. Entergy raises the spectre of a "permanent 'energy penalty' [that] can be up to 5 percent or more of a facility's output, . . . negatively affect[ing] energy supply and electric system reliability. . . [and]requiring greater consumption of fuels . . . which, in turn, generally results in increased air emissions of carbon dioxide and other pollutants." *Id.* at 5, 6 (citing, *inter alia*, 69 Fed. Reg. 41,576, 41,605 (July 9, 2004)); *see also* UWAG Br. at 55 (citing 69 Fed. Reg. at 41,605-06, and broadly asserting that "changes to the cooling system often create significant adverse side-effects, most notably energy penalties and increased air emissions.").

Surfrider Foundation v. U.S. EPA, No 04-6692-ag(L) (2d Cir. July 26, 2005) (“HealthLink Br.”).

Environmental Amici and other citizen groups first pointed out in comments to EPA on its proposed rule that the Agency’s energy penalty and related air emissions assumptions were overstated and based on a flawed computer modeling. 316bEFR.061.001 at 1927. Specifically, in developing its projections of the rule’s impacts on electricity markets, the Agency relied on the IPM 2000 computer model of the domestic electric power market that simulates how power generators are likely to respond over time to various “user-specific constraints” such as new environmental regulations. 67 Fed. Reg. at 17,181/3.

Environmental Amici demonstrated that the Agency’s projections based on IPM 2000 were unsound due to a critical flaw in the model, which significantly underestimated the amount of new generating capacity to be built in 2000-2013. 316bEFR.061.015 at 1946. Consequently, even the market impacts cited in the proposed rule, which EPA itself claimed were insignificant,⁵ were inadvertently exaggerated by the Agency. As we pointed out to the Second Circuit, when properly “viewed in the context of the enormous investments being made in new power generation, it became evident that [even] a closed cycle cooling rule would not appreciably affect the reliable supply of energy in the United States.”

⁵ 67 Fed. Reg. at 17,186/1.

HealthLink Br. at 6 (citing 316bEFR.061.008 at 1934, 316bEFR.061.015 at 1946).

EPA acknowledged the problems with its IPM modeling when it issued the final Phase II rule. 316bEFR.061.001 at 1927. However, the final EPA rule continued to reflect and rely on these incorrect assumptions and on the conclusions drawn from them about the extent of the energy penalty and associated environmental impacts. See National Pollutant Discharge Elimination System – Final Regulations to Establish Requirements for Cooling Water Intake Structures at Phase II Existing Facilities, 69 Fed. Reg. 41,576, 41,605-07 (July 9, 2007). Entergy, UWAG, and amici NEI now rely on precisely these same flawed recitations from the final rule as the fundamental basis for their assertions that air quality and climate impacts will be so severe that this Court should override the plain language of section 316(b). Entergy Br. at 6 (citing 69 Fed. Reg. at 41,605 for the proposition that the energy penalty identified by EPA will result in increased emissions of carbon dioxide and other air pollutants); UWAG Br. at 55 (same); NEI Br. at 22 (same). Industry’s statements about the threat of increased air emissions and climate change effects, in other words, derive directly from the same flawed EPA “energy penalty” impacts presented in the preamble to EPA’s final rule.

While any increase in air pollution, and any heightened threat of climate change is of course of significant concern to Environmental Amici and their members, the record below does not demonstrate that

Industry's dire predictions are warranted – and certainly does not show that they are so significant as to justify disregarding the plain text of section 316(b). In particular, even assuming *arguendo* that a plain reading of the statute would result in a closed-cycle cooling rule, the U.S. Department of Energy (“DOE”) found that the “incremental air emissions” due to a rule requiring closed-cycle cooling retrofits, “are not large on a percentage basis (generally, less than one percent).” 316bEFR.010.103 at 261. Additionally the DOE noted that “widespread installation” of closed cycle cooling systems at coal-fired power plants “would likely not impact the ability of the electric generation sector to meet more stringent air emissions caps.” *Id.* at 257.

Finally, some of the Industry arguments are simply speculative. For example, NEI posits that if EPA cannot rely on cost benefit analysis to set cooling water intake structure standards, the costs of installing retrofit cooling technologies *could* cause some nuclear facilities to shut down (or not), thereby *possibly* requiring increased utilization of fossil generation to meet electricity demand (or not), thereby *perhaps* yielding higher air pollutant emissions including carbon dioxide (or not). *See* NEI Br. at 14. But this argument by its very nature is non-conclusive. NEI does not assert that implementation of the Act, as written by Congress necessarily must or will yield this result.

4. Real-world Experience With Cooling Water Intake System Improvements Belies Industry's Dire Predictions.

In stark contrast to the disaster scenarios offered up by Industry before this Court, the decision to convert to newer, cleaner cooling water intake structure systems is often taken as part of a package of overall upgrades and pollution controls, such that the net result is a more efficient plant overall, using much less water and emitting far fewer air pollutants. For example, information available at Modernizing El Segundo's Power Generating System, <http://www.elsegundorepowering.com> (last visited October 1, 2008), describes the win-win-win situation at the El Segundo power plant in California. The owners and operators of that existing facility have decided to replace a once through cooling system with dry cooling as part of a repowering project, eliminating the use of Santa Monica Bay seawater as a coolant. As a result of that project, the overall efficiency of the plant will be improved, energy production is expected to increase by up to 560 megawatts, and overall air emissions from the facility will be significantly reduced, compared to the existing facility. *Id.*

Similarly, at the Bethlehem Energy Center, near Albany, New York, the decision by PSEG Power New York to replace an antiquated once-through cooling system with a hybrid closed cycle/dry cooling system came as part of a decision to replace an older existing plant with a new, more efficient, lower polluting plant with almost twice the capacity of the existing facility.

See Bethlehem Energy Center CCGT Power Plant, New York Power Technology, <http://www.power-technology.com/projects/bethlehem/> (last visited October 1, 2008). At that facility, cooling water withdrawals from the Hudson River (formerly on the order of 500 million gallons per day) were reduced by over 98 percent, while energy generating capacity increased from 400 to 750 megawatts and overall air emissions were reduced by 95 percent. *Id.*

Far from the parade of horrors predicted by Industry petitioners and their amici, these case studies indicate that cooling water system upgrades – even dramatic changes to the most environmentally protective technologies – are not necessarily accompanied by energy capacity losses and air pollution increases.

◆

CONCLUSION

The concerns raised by Industry do not “demonstrate the kind of absurd consequences that would justify departure from the plain language of the statute.” *Public Citizen*, 491 U.S. at 470-472 (Kennedy, J. concurring) (noting that the absurd results doctrine should be applied only in the limited situation “where the result of applying the plain language would be, in a genuine sense absurd, *i.e.*, where it is quite impossible that Congress could have intended the result”). They are not as a legal matter the necessary consequences of implementing the Clean Water

Act as it is written, and they are based on flawed technical assumptions. Nor are industry's concerns supported by real-world experience with the application of newer, more effective power plant cooling water intake structures.

Environmental Amici therefore respectfully submit that this Court should find that there is no legal basis to disregard the plain language of section 316(b) of the Clean Water Act.

Respectfully submitted,

ANN BREWSTER WEEKS
CLEAN AIR TASK FORCE
18 Tremont Street, Suite 530
Boston, MA 02108
(617) 624-0234

OCTOBER 2008